



ENTERED

1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/464,528C

DATE: 02/03/2003 P.6

TIME: 09:10:16

Input Set : A:\BB1205 US NA Corrected Seq Lst..txt

Output Set: N:\CRF4\02032003\I464528C.raw

3 <110> APPLICANT: Li, Zhongsen  
4 Falco, S. Carl  
6 <120> TITLE OF INVENTION: S-ADENOSYL-L-METHIONINE SYNTHETASE PROMOTER AND  
7 ITS USE IN EXPRESSION OF TRANSGENIC GENES IN PLANTS  
9 <130> FILE REFERENCE: BB1205 US NA  
11 <140> CURRENT APPLICATION NUMBER: US/09/464,528C  
C--> 12 <141> CURRENT FILING DATE: 2003-01-27  
14 <160> NUMBER OF SEQ ID NOS: 20  
16 <170> SOFTWARE: Microsoft Office 97  
18 <210> SEQ ID NO: 1  
19 <211> LENGTH: 1518  
20 <212> TYPE: DNA  
21 <213> ORGANISM: Glycine max  
23 <400> SEQUENCE: 1  
24 agccaagccc cactcaacca ccacaccact ctctctgctc ttcttctacc tttcaagttt 60  
25 ttaaagtatt aagatggcag agacattcct atttacctca gattcagtga acgagggaca 120  
26 ccctgacaag ctctgcgacc aaatctccga tgctgtcctc gacgcttgcc ttgaacagga 180  
27 cccagacagc aaggttgccct gcgaaacatg caccaagacc aacttgggtc tgggtcttcgg 240  
28 agagatcacc accaaggcca acgttgacta cgagaagatc gtgcgtgaca cctgcaggaa 300  
29 catcggcttc gtctcaaacg atgtgggact tgatgctgac aactgcaagg tccttgtaaa 360  
30 cattgagcag cagagccctg atattgccca ggggtgtcac ggccacctta ccaaaagacc 420  
31 cgaggaaatc ggtgctggag accagggtca catgtttggc tatgccacgg acgaaacccc 480  
32 agaattgatg ccattgagtc atgttcttgc aactaaactc ggtgctcgtc tcaccgaggt 540  
33 tcgcaagaac ggaacctgcc catggttgag gcctgatggg aaaacccaag tgactgttga 600  
34 gtattacaat gacaacggtg ccattggttc agttcgtgtc cacactgtgc ttatctccac 660  
35 ccaacatgat gagactgtga ccaacgacga aattgcagct gacctcaagg agcatgtgat 720  
36 caagccggtg atcccggaga agtaccttga tgagaagacc attttccact tgaaccctc 780  
37 tggccgtttt gtcattggag gtcctcacgg tgatgctggt ctcaccggcc gcaagatcat 840  
38 catcgatact tacggaggat ggggtgtcga tgggtggtgt gctttctccg ggaaggatcc 900  
39 caccaagggt gataggagtg gtgcttacat tgtgagacag gctgctaaga gcattgtggc 960  
40 aagtggacta gccagaaggt gcattgtgca agtgtcttat gccattggtg tgcccagacc 1020  
41 tttgtctgtc tttgttgaca cctatggcac cgggaagatc catgataagg agattctcaa 1080  
42 cattgtgaag gagaactttg atttcaggcc cggatgatac tccatcaacc ttgatctcaa 1140  
43 gaggggtggg aataacaggt tcttgaagac tgctgcatat ggacacttcg gcagagagga 1200  
44 ccctgacttc acatgggaag tggtaagcc cctcaagtgg gagaaggcct aaggccattc 1260  
45 attccactgc aatgtgctgg gagtttttta gcgttgccct tataatgtct attatccata 1320  
46 actttccacg tcccttgctc tgtgtttttc tctcgtcgtc ctccctctat tttgtttctc 1380  
47 ctgcctttca tttgtaattt tttacatgat caactaaaaa atgtactctc tgttttccga 1440  
48 ccattgtgtc tcttaatatc agtatcaaaa agaattgtcc aagttaaaaa aaaaaaaaaa 1500  
49 aaaaaaaaaa aaaaaaaaaa 1518  
51 <210> SEQ ID NO: 2  
52 <211> LENGTH: 2336  
53 <212> TYPE: DNA

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54 &lt;213&gt; ORGANISM: Glycine max

56 &lt;400&gt; SEQUENCE: 2

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57 atcgatagag acatgttatt cacaaacccat aaaatgatgg ctaaaattgg tgtgattgga 60
58 acgatatctg tttattatga tttcagggcg caaaaatgcg agtacttaat aaaattttac 120
59 atttaaatta gaattttttt tatcaataaa tattaattta ttagttttat tagaaatatt 180
60 aattagaaaa ttttgaatcc ccgattttctc ctctttttct tcgctattca tcatttttcta 240
61 accaaaccaa tcttatatgt tcttcaaatt agaacttgaa attattaatt ataattaaac 300
62 tgaaaacaat ttgggtatcaa ttcataataca tgcttagtaa taaaatgcga taattaattg 360
63 ataaatctgc aaaagatttt acaaatatct ttcagaaaaa attaataaca aattttgtcg 420
64 ttttcattgt gttgggtctga ggaggatttg gcactataga actctcctac ggaccattct 480
65 ttgcacttca actaaacgat ggtcagaatt ggtggggatt ttatattcaa gcatatccct 540
66 ttcaaaactt cctacttact tcgtgcgttc ggtaatcggt aacattagac tttcaaaatc 600
67 atttttaacc cctaaacagt aaatttgaag gacaaaaata atatttttca aatttgatag 660
68 actatttttt ttttgtaatt tgacgaacca aaaccagatt tatcctgaat tttaggaacc 720
69 acagatgtaa ctaaaccaat atttattttat tttctaaaac aaaatttcat ggcagcatgc 780
70 ctccagcccat gaaaaaaacc ttataaaaaat atctacacat tgaccattga aaagttcgtt 840
71 ctcccatggg taaccagatc aaactcacat ccaaacataa catggatatc tccttaccaa 900
72 tcatactaata tattttgggt taaatattaa tcattatttt taagatatta attaagaaat 960
73 taaaagattt tttaaaaaaa tgtataaaat tatattattc atgatttttc atacatttga 1020
74 ttttgataat aaatatattt tttttaattt cttaaaaaat gttgcaagac acttattaga 1080
75 catagtcttg ttctgtttac aaaagcattc atcatttaat acattaaaaa atattttaata 1140
76 ctaacagtag aatcttcttg tgagtgggtg gggagtaggc aacctggcat tgaaacgaga 1200
77 gaaagagagt cagaaccaga agacaaaataa aaagtatgca acaaacaat caaaatcaaa 1260
78 gggcaaaggc tgggggttgc tcaattgggt gctacattca attttcaact cagtcaacgg 1320
79 ttgagattca ctctgacttc cccaatctaa gccgcggatg caaacggttg aatctaacc 1380
80 acaatccaat ctggttactt aggggctttt ccgtcattaa ctacccctg ccaccggtt 1440
81 tccctataaa ttggaactca atgctccctt cttaactcgt atcgcttcag agttgagacc 1500
82 aagacacact cggtcatata tctctctgct tctctcttct cttctacctc tcaaggtact 1560
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84 gtttgctttg cttgtctttt tcctcaactg ggtccatcta ggatccatgt gaaactctac 1680
85 tctttcttta atatctgcgg aatacgcgtt ggactttcag atctagtcca aatcatttca 1740
86 taattgcctt tctttctttt agcttatgag aaataaaaatc attttttttt atttcaaaat 1800
87 aaaccttggg cttgtgtctg actgagatgg ggtttggtga ttacagaatt ttagcgaatt 1860
88 ttgtaattgt acttgtttgt ctgtagtttt gttttgtttt cttgtttctc atacattcct 1920
89 taggcttcaa ttttatcgga gtataggtca caataggaat tcaaactttg agcaggggaa 1980
90 ttaatccctt ctttcaaate cagtttgttt gtatatatgt ttaaaaaatg aaacttttgc 2040
91 tttaaattct attataactt tttttatggc aaaaattttt gcatgtgtct ttgctctcct 2100
92 gttgtaaatt tactgtttag gtactaactc taggcttgtt gtgcagtttt tgaagtataa 2160
93 agatggcaga gacattccta ttcacctcgg agtcagtga caggggacac cctgataagc 2220
94 tctgcgacca aatctccgat gctgtcctcg acgcttgct cgaacaggac ccagacagca 2280
95 aggttgcttg cgaaacatgc accaagacca acttggtcat ggtcttcgga gagatc 2336

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97 &lt;210&gt; SEQ ID NO: 3

98 &lt;211&gt; LENGTH: 522

99 &lt;212&gt; TYPE: DNA

100 &lt;213&gt; ORGANISM: Glycine max

102 &lt;220&gt; FEATURE:

103 &lt;221&gt; NAME/KEY: unsure

104 &lt;222&gt; LOCATION: (405)

105 &lt;223&gt; OTHER INFORMATION: n = a, c, g or t

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108 <221> NAME/KEY: unsure
109 <222> LOCATION: (509)
110 <223> OTHER INFORMATION: n = a, c, g or t
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113 <221> NAME/KEY: unsure
114 <222> LOCATION: (515)
115 <223> OTHER INFORMATION: n = a, c, g or t
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118 gaccaagaca cactcgttca tatactcttc tgctcttctc ttctcttcta cctctcaagt 60
119 ttttgaagta taaagatggc agagacattc ctattcacct cggagtcagt gaacgagggg 120
120 caccctgata agctctgcga ccaaattctcc gatgctgtcc tcgacgcttg cctcgaacag 180
121 gaccagaca gcaaggttgc ctgcgaaaca tgcaccaaga ccaacttggc catggtcttc 240
122 ggagagatca ccaccaaggc caacgttgac tacgagaaga tcgtgcgtga cacctgcagg 300
123 agcatcggct tcatctcaaa cgatgtggga cttgatgtcg acaactgcaa ggtccttgta 360
W--> 124 aacattgagc agcagagccc tgatattgcc cagggcgtgc acggncacct taccaaaaga 420
125 cctgaagaaa ttggcgtggt tgaccaaggt cacatgtttg gctatgccac tgatgaaacc 480
W--> 126 ccaaaattca tgccattgag tcatgttctt gcaancaagc tc 522
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129 <211> LENGTH: 30
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence
133 <220> FEATURE:
134 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
136 <400> SEQUENCE: 4
137 catgccatgg ttatacttca aaaactgcac 30
139 <210> SEQ ID NO: 5
140 <211> LENGTH: 24
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
147 <400> SEQUENCE: 5
148 gctctagatc aaactcacat ccaa 24
150 <210> SEQ ID NO: 6
151 <211> LENGTH: 1314
152 <212> TYPE: DNA
153 <213> ORGANISM: Glycine max
155 <400> SEQUENCE: 6
156 tctagatcaa actcacatcc aaacataaca tggatatctc cttaccaatc atactaatta 60
157 ttttgggtta aataattaatc attattttta agatattaat taagaaatta aaagattttt 120
158 taaaaaaatg tataaaatta tattattcat gatttttcat acatttgatt ttgataataa 180
159 atatattttt ttttaatttct taaaaaatgt tgcaagacac ttattagaca tagtcttggt 240
160 ctgttttaca aagcattcat catttaatac attaaaaaat atttaatact aacagtagaa 300
161 tcttcttggt agtgggtgtg gagtaggcaa cctggcattg aaacgagaga aagagagtca 360
162 gaaccagaag acaataaaaa agtatgcaac aaacaaatca aaatcaaagg gcaaaggctg 420
163 gggttggctc aattgggtgc tacattcaat tttcaactca gtcaacggtt gagattcact 480
164 ctgacttccc caatctaagc cgcggatgca aacggttgaa tctaaccac aatccaatct 540
165 cgttacttag gggcttttcc gtcattaact caccctgcc acccggttc cctataaatt 600

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166 ggaactcaat gctcccctct aaactcgtat cgcttcagag ttgagaccaa gacacactcg 660
167 ttcatatata tctctgctct tctcttctct tctacctctc aagggtacttt tcttctccct 720
168 ctaccaaata ctagattccg tgggtcaatt tcggatcttg cacttctggt ttgctttgcc 780
169 ttgctttttc ctcaactggg tccatctagg atccatgtga aactctactc tttctttaat 840
170 atctgcggaa tacgcgttg actttcagat ctagtgcgaa tcatttcata attgcctttc 900
171 tttcttttag cttatgagaa ataaaatcat ttttttttat ttcaaaataa accttgggcc 960
172 ttgtgctgac tgagatggg tttggtgatt acagaatttt agcgaatttt gtaattgtac 1020
173 ttgtttgtct gtagttttgt tttgttttct tgtttctcat acattcctta ggcttcaatt 1080
174 ttattcgagt ataggtcaca ataggaattc aaactttgag cagggaatt aatcccttcc 1140
175 ttcaaatacca gtttgtttgt atatatgttt aaaaaatgaa acttttgctt taaattctat 1200
176 tataactttt tttatggcaa aaatttttgc atgtgtcttt gctctcctgt tgtaaattta 1260
177 ctgttttaggt actaactcta ggcttggtgt gcagtttttg aagtataacc atgg 1314
179 <210> SEQ ID NO: 7
180 <211> LENGTH: 22
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
187 <400> SEQUENCE: 7
188 ttcgagtata ggtcacaata gg 22
190 <210> SEQ ID NO: 8
191 <211> LENGTH: 19
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
198 <400> SEQUENCE: 8
199 cttcgctgag gacatggac 19
201 <210> SEQ ID NO: 9
202 <211> LENGTH: 21
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
206 <220> FEATURE:
207 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
209 <400> SEQUENCE: 9
210 gagttgtcgc tgttgttcga c 21
212 <210> SEQ ID NO: 10
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214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer
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221 aacacagcat ccgcattgcg 20
223 <210> SEQ ID NO: 11
224 <211> LENGTH: 21
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:

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229 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer  
 231 <400> SEQUENCE: 11  
 232 aggagtgcag aatcagatca g 21  
 234 <210> SEQ ID NO: 12  
 235 <211> LENGTH: 20  
 236 <212> TYPE: DNA  
 237 <213> ORGANISM: Artificial Sequence  
 239 <220> FEATURE:  
 240 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer  
 242 <400> SEQUENCE: 12  
 243 gctgatcgaa ccagatggag 20  
 245 <210> SEQ ID NO: 13  
 246 <211> LENGTH: 23  
 247 <212> TYPE: DNA  
 248 <213> ORGANISM: Artificial Sequence  
 250 <220> FEATURE:  
 251 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR Primer  
 253 <400> SEQUENCE: 13  
 254 ctgtacagtt aaacagtagt tct 23  
 256 <210> SEQ ID NO: 14  
 257 <211> LENGTH: 2165  
 258 <212> TYPE: DNA  
 259 <213> ORGANISM: Glycine max  
 261 <400> SEQUENCE: 14  
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 263 acgatatctg tttattatga ttccaggcg caaaaatgag agtacttaat aaaattttac 120  
 264 atttaaatta gaattttttt tatcaataaa tattaattta ttagttttat tagaaatatt 180  
 265 aattagaaaa ttttgaatcc ccgattttct ctccttttct tcgctattca tcattttcta 240  
 266 accaaaccaa tcttatatgt tcttcaaatt agaacttgaa attattaatt ataattaac 300  
 267 tgaaaacaat ttggtatcaa ttcatataca tgcttagtaa taaaatgcga taattaattg 360  
 268 ataaatctgc aaaagatttt acaaatatct ttcagaaaaa attaataaca aattttgtcg 420  
 269 ttttcatggt gttggtctga ggaggatttg gcactataga actctcctac ggaccattct 480  
 270 ttgcacttca actaaacgat ggtcagaatt ggtggggatt ttatattcaa gcatatccct 540  
 271 ttcaaaaactt cctacttact tcgtgcgttc ggtaatcggg aacattagac tttcaaaatc 600  
 272 attttttaacc cctaaacagt aaatttgaag gacaaaaata atatttttca aatttgatag 660  
 273 actatttttt ttttgaatt tgacgaacca aaaccagatt tatcctgaat ttttaggaacc 720  
 274 acagatgtaa ctaaaaccaat atttatttat tttctaaaaa aaaatttcat ggcagcatgc 780  
 275 ctacagccat gaaaaaaacc ttataaaaat atctacacat tgaccattga aaagttcggt 840  
 276 ctcccatggg taaccagatc aaactcacat ccaaacataa catggatatt tccttaccac 900  
 277 tcataactaat tattttgggt taaatattaa tcattatttt taagatatta attaagaat 960  
 278 taaaagattt ttttaaaaaa tgtataaaat tatattattc atgatttttc ataattttga 1020  
 279 ttttgataat aaatatattt tttttaattt cttaaaaaat gttgcaagac acttattaga 1080  
 280 catagctctg ttctgtttac aaaagcattc atcatttaat acattaaaaa atatttaata 1140  
 281 ctaacagtag aatcttcttg tgagtgggtg gggagtaggc aacctggcat tgaaacgaga 1200  
 282 gaaagagagt cagaaccaga agacaaataa aaagtatgca acaaacaat caaatcaaa 1260  
 283 gggcaaaggc tggggttggc tcaattgggt gctacattca attttcaact cagtcaacgg 1320  
 284 ttgagattca ctctgacttc cccaatctaa gccgcggatg caaacggttg aatctaacc 1380  
 285 acaatccaat ctcgttactt aggggctttt ccgtcattaa ctacccctg ccaccgggt 1440  
 286 tccctataaa ttggaactca atgctcccct ctaaactcgt atcgcttcag agttgagacc 1500

RAW SEQUENCE LISTING ERROR SUMMARY  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 405,509,515  
Seq#:17; N Pos. 3367  
Seq#:18; N Pos. 3249  
Seq#:19; N Pos. 2948  
Seq#:20; N Pos. 3227

**VERIFICATION SUMMARY**

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Input Set : A:\BB1205 US NA Corrected\Seq Lst..txt

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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:360

L:126 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:480

L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:3360

L:553 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:3240

L:630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:2940

L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:3180